

“The new Australian Curriculum”

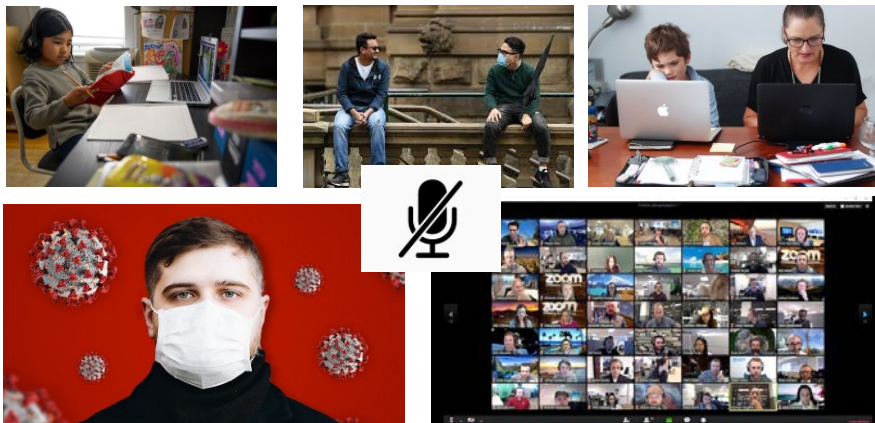
David de Carvalho, The Age Schools Summit, 27 April 2021

Thank you for that welcome Adam.

Allow me to acknowledge the Traditional Owners of the land on which we gather today and pay our respects to their Elders who have been, are now, and will continue to be, true educators: passing on the knowledge and wisdom of the world’s oldest living culture from generation to generation, and offering that knowledge and wisdom to the wider Australian community.

I am particularly pleased to be here today because this week is an important **week** for education in Australia and in fact it is an important **year** for education in Australia.

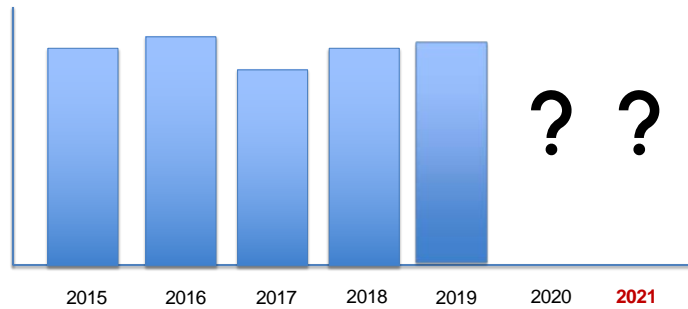
2021 is an important year because it is the year of reflection on the impact of COVID. COVID is by no means over, and who knows how long it will go on. Even when we are all vaccinated and the infections and deaths have stopped, the economic, social and cultural impact of the pandemic will be felt for years.



What of the educational impact?

On the upside, COVID has led to a greater appreciation of our teachers’ professionalism and dedication. But the cancellation of NAPLAN in 2020 left a big data gap. The data from this year’s NAPLAN assessment will be particularly important in helping to show the impact COVID has had in terms of learning gain (or loss) in literacy and numeracy, particularly in Victoria where you felt the impacts of COVID so significantly.

NAPLAN 2021: picking up the data trail after the missing year of 2020



The data that we get from NAPLAN is important, but it is not a measure of overall school quality, and we need to remember that education is a complex multi-dimensional process where improvement does not rely on the rationalistic analysis of data and the application of associated managerial techniques.

There are many aspects of schooling that arguably cannot or should not be captured as quantitative data. Schooling should be data-informed, but not be data-driven.

This is because the essential nature of education is that it involves a sense of historic continuity and conversation between generations, between teachers and their students, where a learner is engaged in the process of becoming a well-rounded human being; that is, a person who recognises themselves to be related to others in virtue of participation in, and enjoyment of, multiple systems of meaning, feeling, imagination, desire, recognition, intellectual pursuits and collective actions, moral and religious beliefs, customs and conventions, principles of conduct and rules that denote rights and responsibilities.

This conversation between the generations is the basis of the curriculum.



The Australian Curriculum has been under review since June last year, when Ministers agreed to terms of reference. It was first reviewed in 2014 and the current version has been in place since 2015. The review will be completed by the start of next year, and will be reviewed every 6 years.

Up to now, we have been working with 18 teacher and curriculum reference groups established to support the review, made up of 360 teachers and curriculum authority representatives from across Australia, as well as consulting with our peak national subject bodies and key academics. I've also had discussions with the staff from 24 primary schools across the country.



- 18 teacher and curriculum reference groups
- 360 teachers and curriculum experts
- Subject associations
- Key academics
- 24 primary schools

But on Thursday, we begin public consultations on the proposed revisions to the Foundation to Year 10 Australian Curriculum. Which is why this is one of the most important weeks in education in Australia. In a few days, as part of the review, you will have a once in six-year opportunity to give us feedback on the proposed national curriculum.



The Australian Curriculum sets the expectations for what all young Australians should be taught, regardless of where they live or their background.

The thing about a national curriculum is that it takes many hands... and it is not light work.

It is one of the most important levers we have that helps to set up our young people not only for their future but for our country's future as a democratic, equitable and just society that is prosperous, cohesive and culturally diverse.

Ministers have given ACARA the task of improving the Australian Curriculum by refining, realigning and decluttering the curriculum to make it more helpful for teachers, which then makes it more accessible for students.

Improve the curriculum by

- Refining
- Realigning
- Decluttering

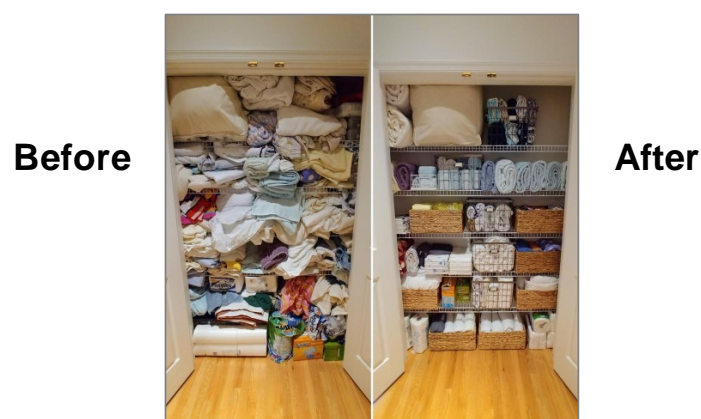
But what do we mean by decluttering? Obviously, it will entail some reduction in content, but that is not the only focus, and arguably not the main one.

I've heard some stakeholders say that we should be "taking a chainsaw to the curriculum", but chainsaws are not particularly subtle, and can leave an awful mess behind.

I prefer to use the analogy of a hedge-trimmer and the pruning secateurs, which not only cut back, but also tidy up, reshape and clear out old and redundant branches to make room for new growth or the grafting on of new elements.

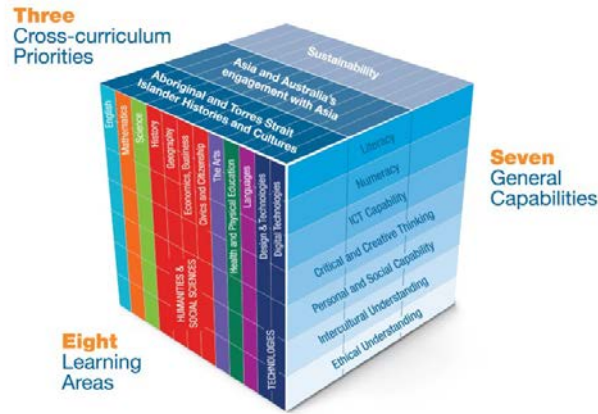


Another way to describe what are hoping to achieve is that we want to give the Australian Curriculum the Marie Kondo treatment so that regardless of how much content is left in the curriculum, it is properly organized, logical in its presentation and sequence, coherent, clear and easily accessible.



The Australian Curriculum has three dimensions: the eight learning areas, the three cross-curriculum priorities and the general capabilities.

Structure of the Australian Curriculum: 3 dimensions



As part of the decluttering, we want to clarify the relationship between the three dimensions of the curriculum. We need to be clear that learning areas have primacy of place in the curriculum. The general capabilities and the cross-curriculum priorities are best taught by being integrated appropriately and authentically into the teaching of the learning areas, not as separate “add-ons” that would contribute to an over-crowded curriculum.

Not every cross-curriculum priority and general capability can be addressed in every learning area. Some learning areas are better suited to the development of particular general capabilities than others, and each of the three cross-curriculum priorities find more natural homes in certain learning areas.

We need to avoid perpetuating a false dichotomy between factual knowledge and capabilities such as collaboration and critical thinking. As the former Chief Scientist, Alan Finkel was fond of saying:



Alan Finkel
Australia's Chief Scientist
2016-2020

‘Generic skills only have meaning within specific domains of knowledge.’

‘What’s the use of learning to collaborate if you don’t have anything distinctive to contribute?’

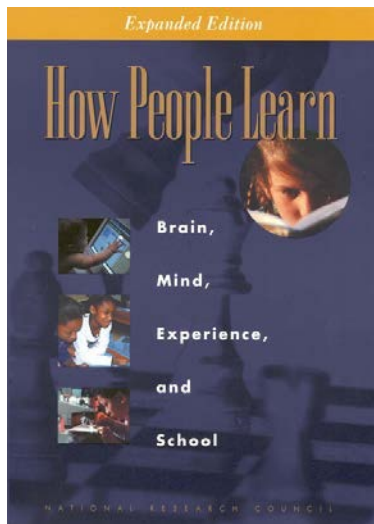
You can’t engage critically and creatively on a topic if you lack the relevant background knowledge.

This is why, if you hear people talking about the need to emphasise capabilities such as critical and creative thinking over and above factual knowledge, you should raise an eyebrow and interrogate statements closely. They are often preceded by some version of the following notion: “Students don’t need to learn facts now. They can go to Google.”

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This sets up a false dichotomy between factual knowledge and the ability to think creatively and critically. It also confuses knowledge with the ability to recall facts. While knowledge and recall overlap, they are not the same thing.

In “How People Learn”, the US National Research Council stated that facts are important for thinking and problems solving.



“...facts are important for thinking and problem -solving. Research on expertise in areas such as chess, history, science and mathematics demonstrate that experts’ abilities to think and solve problems depend strongly on a rich body of knowledge about subject matter.

However, the research also shows clearly that ‘usable knowledge’ is not the same as a mere list of disconnected facts. Experts’ knowledge is connected and organised around important concepts (eg, Newton’s second law of motion); ... it supports understanding and transfer (to other contexts) rather than only the ability to remember.”

So the ability to recall facts from memory is not necessarily evidence of having genuine understanding.

A student might, for example, memorise the formula for calculating the length of the hypotenuse if given the length of the other two sides of a right-angle triangle, but do they understand *why* that formula, known as Pythagoras’ theorem, works every time? The process of discovering that for themselves, with the assistance of the teacher, is what makes learning exciting. And it’s what make teaching exciting. Seeing the look of excitement on the face of the student when they experience that “aha!” moment.

“Aha! Now I get it!” : the moment of INSIGHT



And when we understand a topic, it is easier to recall the facts because they are no longer just random bits of information but are organised into intelligible ideas. Not only do we know where the dots are, but we know why they are there and how to join them.

If we want our young people to be creative and critical thinkers and problem solvers, then it is crucial that factual knowledge about a topic is taught in ways that promote understanding. Depth of understanding is built up over time, which is why, in the revisions to the Australian Curriculum, there has been a focus on creating more space for teachers to teach key concepts and facts in a way that deepens understanding and makes it possible to think critically and creatively about a topic and solve related problems.

One way we are doing this is through our efforts to improve the language used in the content descriptions and the achievement standards to make it clearer, more explicit, detailed and specific. That way teachers do not have spend excessive amounts of time working out exactly what is expected.

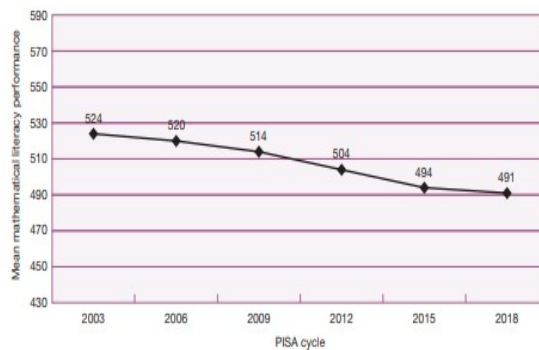
Some learning areas have only required some tidying – but others have required more focus. Maths for example has required greater improvement and updating.

If we look at our PISA and our TIMSS results, Australian students are not bad at knowing the “what”, but we are not as strong at “why” of mathematics, that is, being able to think mathematically so as to be able to apply mathematical procedures in different situations. We are good at knowing the rules of Mathematics, but not good at understanding the reasons for those rules or applying them.

Maths

PISA performance has declined in Australia in the long -term by the equivalent of more than a full school year in mathematics.

First time in the assessment’s history, Australia has failed to meet an OECD average.



The public conversation about how the Maths curriculum needs revision has already got underway in earnest. For example, reinforcing the point above from the US National Research Council, this joint statement from five of the leading maths and science organisations in the country is an indication of the level of interest out there about the curriculum.

JOINT MATHS STATEMENT

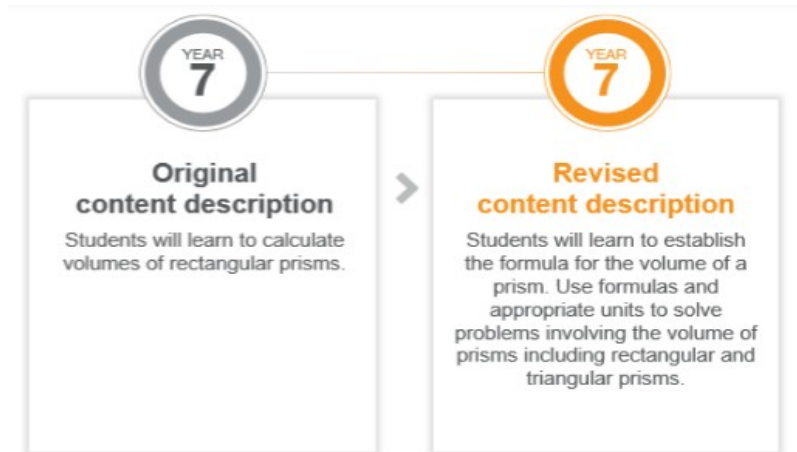
“ We need education systems and curricula that help deliver students to society who are up for such a challenge – just having knowledge is no longer enough. Instead, the abilities to problem-solve, mathematise, hypothesise, model are all skills that add worth to acquired knowledge. Mathematics learning cannot sit in silos that focus on content and procedures. Instead, it must be something that gives the knowledge purpose. ”



Again – knowledge and capabilities being acquired together.

It should be noted that the current Australian Curriculum in Mathematics *already* includes four Proficiency Strands: understanding, fluency, problem-solving and reasoning. The issue has been that these proficiencies have not been incorporated into the Content Descriptions, which is what teachers focus on.

So the major change we have made in the proposed revisions to Maths is to make these proficiencies more visible by incorporating them into the Content Descriptions. For example, to give you a preview of what will be available for comment on Thursday, here is how we are proposing to change two content descriptions in Year 3 Maths.



It's important to note here that we are not talking about generic problem-solving skills, but the ability to apply specific formulas to specific types of problems.

It is also important to note that in proposing these revisions, ACARA is not making any recommendations about pedagogical approaches. How best to teach content is a matter for teachers who know their students best. But they do need to be taught. Which is why as the five national Maths and Science organisations said in their joint statement that ongoing professional development is so important.



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Revising a national curriculum is a high stakes exercise because our students deserve our best efforts and highest aspirations. Here is a quote from the former Chairman of the ACARA Board, Barry McGaw in response to the first Review of the Australian Curriculum in 2014.

“What constitutes essential school learning will always be contested because behind it is a debate about what knowledge is of most worth. Curriculum stirs the passions—and that is a good thing. Curriculum is never completed. It is never perfect and should always be a work in progress”.

- Barry McGaw

Former Chairman of the ACARA Board

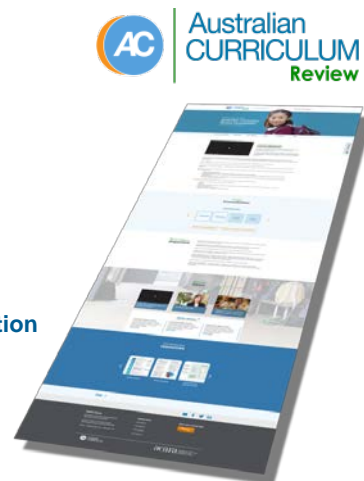
On Thursday we are launching a new consultation website where you will find the detailed revisions and the reasons for them.

AC Review consultation

Opens: Thursday 29 April

Closes: Thursday 8 July

<http://www.australiancurriculum.edu.au/consultation>



I expect we will see a stirring of the passions. No doubt some will argue the proposed revisions don't go far enough, while others will say they go too far, and this is likely to vary from learning area to learning area. This discussion and civil debate is a good thing.

We hope that when teachers go to the consultation website, they will see there a draft curriculum that excites them, values them as professionals and hits the nail on the head in terms of what our students need to learn.

National curriculums are nation-building and they are everyone's business. We're hoping many will take the time to read the revisions and give their feedback and in doing so, that we all keep in mind the needs of our students and work together to deliver an Australian Curriculum for them.